OM protein - nucleic search, using frame_plus_p2n model

Run on:  January 17, 2003, 16:58:02 ; Search time 1852.4 Seconds
         (without alignments)
         122,402 Million cell updates/sec

GenCore version 5.1.3
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Title:            US-09-856-070-17
Perfect score:    69
Sequence:         1 EREKFQMMFEKEEL 14

Scoring table:    BLOSUM62
                  Xgapop  10.0 , Xgapext   0.5
                  Ygapop  10.0 , Ygapext   0.5
                  Fgapop   6.0 , Fgapext   7.0
                  Delop    6.0 , Delext    7.0

Searched:         16154066 seqs, 8097743376 residues

Total number of hits satisfying chosen parameters:    32308132

Minimum DB seq length: 0
Maximum DB seq length: 2000000000

Post-processing. Minimum Match 0%
                 Maximum Match 100%
                 Listing first 45 summaries

Command line parameters:
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-DB=EST  -QFMT=fastap -SUFFIX=rst -MINMAT=H=0.1 -L=0 -L=0PEXT=0
-UNITS=bits  -START=1 -END=-1 -MATRIX=blosum62 -TRANS=human40 cdi -LIST=45
-DOCALIGN=200 -THE_SCORE=pct -THR_MAX=100 -THR_MIN=0 -ALIGN 15 -MODE=LOCAL
-QUTFMT=pto -NORM=ext -HEAPSIZE=500 -MINLEN=0 -MAXLEN=200000000
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-WARN_TIMEOUT=30 -THREADS=1 -XGAPOP=10 -XGAPEXT=0.5 -FGAPOP=6 -FGAPEXT=7
-YGAPOP=10 -YGAPEXT=0.5 -DELOP=6 -DELEXT=7

Database :   EST
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  2:  em_esthum  *
  3:  em_estin:  *
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  6:  em_estpl:  *
  7:  em_estvr:  *
  8:  em_htc:  *
  9:  qb_estl:  *
  10:  qb_est2:  *
  11:  qb_htc:  *
  12:  qb_est3:  *
  13:  qb_est4:  *
  14:  qb_est5:  *
  15:  em_esttun:  *
  16:  em_estrom:  *
  17:  qb_gss:  *
  18:  em_gss_hum:  *
  19:  em_gss_inv:  *
  20:  em_gss_pln:  *
  21:  em_gss_vrt:  *
  22:  em_gss_fun:  *
  23:  em_gss_mam:  *
  24:  em_gss_mus:  *
  25:  em_gss_other:  *
  26:  em_gss_pro:  *
  27:  em_gss_rod:  *

SUMMARIES

| Result No. | Score | % Query Match | Length | DB | ID | Description |
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| 1 | 69 | 100.0 | 214 | 13 | BI052878 | BI052878 RC5-GN028 |
| 2 | 69 | 100.0 | 214 | 14 | BI054475 | BI054475 RC5-GN028 |
| 3 | 69 | 100.0 | 215 | 14 | BG754561 | BG754561 RC5-GN028 |
| 4 | 69 | 100.0 | 234 | 12 | BG754562 | BG754562 EG27/0194 |
| 5 | 69 | 100.0 | 245 | 14 | BE843004 | BE843004 MF4-ST024 |
| 6 | 69 | 100.0 | 275 | 14 | BM844124 | BM844124 K-EST0122 |
| 7 | 69 | 100.0 | 279 | 13 | BF804323 | BF804323 QV4-CT015 |
| 8 | 69 | 100.0 | 281 | 10 | AW845219 | AW845219 CM0-CT001 |
| 9 | 69 | 100.0 | 294 | 13 | BI050028 | BI050028 CM2-GN029 |
| 10 | 69 | 100.0 | 312 | 14 | BM827086 | BM827086 K-EST0099 |
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| 14 | 69 | 100.0 | 401 | 14 | BQ318340 | BQ318340 MR1-CT052 |
| 15 | 69 | 100.0 | 404 | 14 | BM744771 | BM744771 K-EST0018 |
| 16 | 69 | 100.0 | 413 | 14 | BQ300862 | BQ300862 MR4-KT004 |
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| 18 | 69 | 100.0 | 437 | 14 | BM844405 | BM844405 K-EST0122 |
| 19 | 69 | 100.0 | 447 | 10 | AW997331 | AW997331 RC2-BN004 |
| 20 | 69 | 100.0 | 455 | 14 | BM834336 | BM834336 K-EST0109 |
| 21 | 69 | 100.0 | 460 | 14 | BM846053 | BM846053 K-EST0124 |
| 22 | 69 | 100.0 | 469 | 9 | AI834242 | AI834242 PC0-HT001 |
| 23 | 69 | 100.0 | 484 | 10 | AW845215 | AW845215 CM0-CT001 |
| 24 | 69 | 100.0 | 484 | 10 | BE314916 | BE314916 601140093 |
| 25 | 69 | 100.0 | 484 | 14 | BM834208 | BM834208 K-EST0109 |
| 26 | 69 | 100.0 | 490 | 14 | BI054723 | BI054723 RC5-GN028 |
| 27 | 69 | 100.0 | 495 | 14 | BM785233 | BM785233 K-EST0089 |
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| 30 | 69 | 100.0 | 549 | 14 | AI496462 | AI496462 RC-HT108 |
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| 32 | 69 | 100.0 | 541 | 14 | BM741279 | BM741279 K-EST0042 |
| 33 | 69 | 100.0 | 548 | 14 | BM788935 | BM788935 K-EST0067 |
| 34 | 69 | 100.0 | 553 | 14 | BM762412 | BM762412 K-EST0044 |
| 35 | 69 | 100.0 | 556 | 12 | BF944557 | BF944557 MR3-GN015 |
| 36 | 69 | 100.0 | 564 | 12 | BC746504 | BC746504 602708802 |
| 37 | 69 | 100.0 | 572 | 14 | BM744b65 | BM744b65 K-EST0018 |
| 38 | 69 | 100.0 | 574 | 10 | BM745413 | BM745413 601174309 |
| 39 | 69 | 100.0 | 583 | 14 | BM783500 | BM783500 K-EST0061 |
| 40 | 69 | 100.0 | 590 | 14 | BM783604 | BM783604 K-EST0061 |
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| 44 | 69 | 100.0 | 609 | 13 | BI260897 | BI260897 602729342 |
| 45 | 69 | 100.0 | 615 | 14 | BM745140 | BM745140 K-EST0063 |

ALIGNMENTS

RESULT 1
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LOCUS       BI052878                 214 bp    mRNA    linear    EST 15-JUN-2001
DEFINITION  RC5-GN028-230101-021-F02 GN0281 Homo sapiens cDNA, mRNA sequence.
ACCESSION   BI052878
VERSION     BI052878.1   GI:14460408
KEYWORDS    EST.
SOURCE      human.
  ORGANISM  Homo sapiens
            Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
            Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
REFERENCE   1  (bases 1 to 214)
  AUTHORS   Dias Neto,E., Garcia Correa,R., Verjovski-Almeida,S., Briones,M.R.,
            Nagai,M.A., da Silva,W.Jr., Zago,M.A., Bordin,S., Costa,F.F.,
            Goldman,G.H., Carvalho,A.F., Matsukuma,A., Baia,G.S., Simpson,D.H.,

**Column 1**

TITLE     Brunstein,A., deOliveira,P.S., Bucher,P., Jongeneel,C.V., O'Hare
          ,M.J., Soares,F., Brentani,R.R., Reis,L.F., de Souza,S.J. and
          Simpson,A.J.
          Shotgun sequencing of the human transcriptome with ORF expressed
          sequence tags
JOURNAL   Proc. Natl. Acad. Sci. U.S.A. 97 (7), 3491-3496 (2000)
MEDLINE   20202663
COMMENT   Contact: Simpson A.J.G.
          Laboratory of Cancer Genetics
          Ludwig Institute for Cancer Research
          Rua Prof. Antonio Prudente 109, 4 andar, 01500-010, Sao Paulo-SP
          Brazil
          Tel: +55-11-2704922
          Fax: +55-11-2707001
          Email: asimpson@ludwig.org.br
          This sequence was derived from the FAPESP/LICR Human Cancer Genome
          Project. This entry can be seen in the following URL
          (http://www.ludwig.org.br/scripts/getfasta)
          010201-021-H026t3-2001-01-23t4-1)
          Seq primer: puc 18 forward
          High quality sequence stop: 214.
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                     /organism="Homo sapiens"
                     /db_xref="taxon:9606"
                     /clone_lib="CN0281"
                     /dev_stage="Adult"
                     /note="Organ: placenta normal; Vector: puc18; Site_1: SmaI
                     ; Site_2: SmaI A mini library was made by cloning
                     products derived from ORESTES PCR (U.S. Letters Patent
                     application No. 196,716 - Ludwig Institute for Cancer
                     Research) profiles into the puc 18 vector. Reverse
                     transcription of tissue mRNA and cDNA amplification were
                     performed under low stringency conditions."
BASE COUNT    67 a     36 c     88 g     23 t
ORIGIN

Alignment Scores:
Pred. No.:            0.121
Score:               69.00
Percent Similarity:  100.00%                    Length:          214
Best Local Similarity: 100.00%                  Matches:          14
Query Match:         13                         Conservative:      0
DB:                                             Mismatches:        0
                                                Indels:            0
                                                Gaps:              0

US-09-856-070-17 (1-14) x BI052878 (1-214)

Qy   1 GluArgGluLysGluMetMetArgGluLysGluGluLeu 14
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Db  23 GAGAGAGAAAGAGCCAGATCGCGCGAGAAGGAGCAGTTG 64

RESULT 2
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LOCUS       BI054475              214 bp    mRNA    linear    EST 15-JUN-2001
DEFINITION  RC5-CN0281 010201 012 H01 CN0281 Homo sapiens cDNA. mRNA sequence.
ACCESSION   BI054475
VERSION     BI054475.1  GI:14462005
KEYWORDS    EST.
SOURCE      human.
ORGANISM    Homo sapiens
            Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
            Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
REFERENCE   1 (bases 1 to 214)
AUTHORS     Dias Neto,E., Garcia Correa,R., Verjovski-Almeida,S., Briones,M.R.,
            Nagai,M.A., da Silva,W.Jr., Zago,M.A., Bordin,S., Costa,F.F.,
            Goldman,G.H., Carvalho,A.F., Matsukuma,A., Baia,C.S., Simpson,D.H.,
            Brunstein,A., deOliveira,P.S., Bucher,P., Jongeneel,C.V., O'Hare
            ,M.J., Soares,F., Brentani,R.R., Reis,L.F., de Souza,S.J. and
            Simpson,A.J.
TITLE       Shotgun sequencing of the human transcriptome with ORF expressed
            sequence tags
JOURNAL     Proc. Natl. Acad. Sci. U.S.A. 97 (7), 3491-3496 (2000)
MEDLINE     20202663

**Column 2**

COMMENT   Contact: Simpson A.J.G.
          Laboratory of Cancer Genetics
          Ludwig Institute for Cancer Research
          Rua Prof. Antonio Prudente 109, 4 andar, 01509-010, Sao Paulo-SP,
          Brazil
          Tel: +55-11-2704922
          Fax: +55-11-2707001
          Email: asimpson@ludwig.org.br
          This sequence was derived from the FAPESP/LICR Human Cancer Genome
          Project. This entry can be seen in the following URL
          (http://www.ludwig.org.br/scripts/getfasta)
          010201-012-H01st3-2001-02-01st4-1)
          Seq primer: puc 18 forward
          High quality sequence stop: 214.
FEATURES             Location/Qualifiers
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                     /organism="Homo sapiens"
                     /db_xref="taxon:9606"
                     /clone_lib="CN0281"
                     /dev_stage="Adult"
                     /note="Organ: placenta normal; Vector: puc18; Site_1: SmaI
                     ; Site_2: SmaI A mini library was made by cloning
                     products derived from ORESTES PCR (U.S. Letters Patent
                     application No. 196,716 - Ludwig Institute for Cancer
                     Research) profiles into the puc 18 vector. Reverse
                     transcription of tissue mRNA and cDNA amplification were
                     performed under low stringency conditions."
BASE COUNT    68 a     36 c     88 g     22 t
ORIGIN

Alignment Scores:
Pred. No.:            0.121
Score:               69.00
Percent Similarity:  100.00%                    Length:          214
Best Local Similarity: 100.00%                  Matches:          14
Query Match:         13                         Conservative:      0
DB:                                             Mismatches:        0
                                                Indels:            0
                                                Gaps:              0

US-09-856-070-17 (1-14) x BI054475 (1-214)

Qy   1 GluArgGluLysGluLeuMetMetArgGluLysGluGluLeu 14
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Db  23 GAGAGAGAAAGAGCCAGATCGCGCGAGAAGGAGCAGTTG 64

RESULT 3
BQ367833/c
LOCUS       BQ367833              215 bp    mRNA    linear    EST 21-MAY-2002
DEFINITION  RC5-CN0281-150201 014 A02 CN0281 Homo sapiens cDNA, mRNA sequence.
ACCESSION   BQ367833
VERSION     BQ367833.1  GI:21043334
KEYWORDS    EST.
SOURCE      human.
ORGANISM    Homo sapiens
            Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
            Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
REFERENCE   1 (bases 1 to 215)
AUTHORS     Dias Neto,E., Garcia Correa,R., Verjovski-Almeida,S., Briones,M.R.,
            Nagai,M.A., da Silva,W.Jr., Zago,M.A., Bordin,S., Costa,F.F.,
            Goldman,G.H., Carvalho,A.F., Matsukuma,A., Baia,G.S., Simpson,D.H.,
            Brunstein,A., deOliveira,P.S., Bucher,P., Jongeneel,C.V., O'Hare
            ,M.J., Soares,F., Brentani,R.R., Reis,L.F., de Souza,S.J. and
            Simpson,A.J.
TITLE       Shotgun sequencing of the human transcriptome with ORF expressed
            sequence tags
JOURNAL     Proc. Natl. Acad. Sci. U.S.A. 97 (7), 3491-3496 (2000)
MEDLINE     20202663
COMMENT   Contact: Simpson A.J.G.
          Laboratory of Cancer Genetics
          Ludwig Institute for Cancer Research
          Rua Prof. Antonio Prudente 109, 4 andar, 01500-010, Sao Paulo-SP,
          Brazil
          Tel: +55-11-2704922
          Fax: +55-11-2707001

Email: asimpson@ludwig.org.br
This sequence was derived from the FAPESP/LICR Human Cancer Genome
Project. This entry can be seen in the following URL
(http://www.ludwig.org.br/scripts/gethtml2.pl?1-PCS&12-PCS-GN0281-
150201-011-A09&t2-2001-02-15&t4-1)
Seq primer: puc 18 forward.

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              /db_xref="taxon:9606"
              /clone_lib="GN0281"
              /dev_stage="Adult"
              /note="Organ: placenta_normal; Vector: puc18; Site_1: SmaI
              ; Site_2: SmaI; A mini library was made by cloning
              products derived from ORESTES PCR (U.S. Letters Patent
              application No. 196,716 – Ludwig Institute for Cancer
              Research) profiles into the puc 18 vector. Reverse
              transcription of tissue mRNA and cDNA amplification were
              performed under low stringency conditions."

BASE COUNT    22 a    91 c    34 g    68 t
ORIGIN

Alignment Scores:
Pred. No.:               0.121
Score:                   69.00
Percent Similarity:      100.00%
Best Local Similarity:   100.00%
Query Match:             100.00%
DB:                      14

Length:        215
Matches:       14
Conservative:  0
Mismatches:    0
Indels:        0
Gaps:          0

US-09-856-070-17 (1-14) x HQ367833 (1-215)

Qy     1 GluArgGluLysGluGlnMetMetArgGluLysGluGlnLeu 14
         ||||||||||||||||||||||||||||||||||||||||||
Db   193 GAGAGAGAAGAGAAAGAGCAGATGATGCGAGAGAAGGAGAGTTG 152

RESULT 4
HG754562
LOCUS        BG754562                    234 bp    mRNA    linear    EST 15-MAY-2001
DEFINITION   602710194F1 NIH_MGC_48 Homo sapiens cDNA clone IMAGE:4846610 5',
             mRNA sequence.
ACCESSION    HG754562
VERSION      HG754562.1  GI:14065215
KEYWORDS     EST.
SOURCE       human.
ORGANISM     Homo sapiens
             Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
             Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
REFERENCE    1  (bases 1 to 234)
AUTHORS      NIH-MGC http://mgc.nci.nih.gov/,
TITLE        National Institutes of Health, Mammalian Gene Collection (MGC)
JOURNAL      Unpublished (1999)
COMMENT      Contact: Robert Strausberg, Ph.D.
             Email: cgapbs-r@mail.nih.gov
             Tissue procurement: Louis M. Staudt, M.D., Ph.D.
             cDNA Library Preparation: Ling Hong/Rubic Laboratory
             cDNA Library Arrayed by: The I.M.A.G.E. Consortium (LLNL)
             DNA Sequencing by: Incyte Genomics, Inc.
             Clone distribution: MGC clone distribution information can be
             found through the I.M.A.G.E. Consortium/LLNL at:
             http://image.llnl.gov
             Plate: LLCM1687 row: 1  column: 23
             High quality sequence stop: 234.

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              /db_xref="taxon:9606"
              /clone="IMAGE:4846610"
              /clone_lib="NIH_MGC_48"
              /tissue_type="primary B-cells from tonsils (cell line)"
              /lab_host="DH10B (phage-resistant)"
              /note="Organ: B-cells; Vector: pCTB7, Site_1: XhoI,
              Site_2: EcoRI; cDNA made by oligo dT priming.

---

Directionally cloned into EcoRI/XhoI sites using the
following 5' adaptor: GGCACGAG(G). Size selected .500bp
for average insert size 1.8kb. Library constructed by Ling
Hong in the laboratory of Gerald M. Rubin (University of
California, Berkeley) using ZAP cDNA synthesis kit
(Stratagene) and Superscript II RT (Life technologies).
Note: this is a NIH_MGC library."

BASE COUNT    81 a    38 c    96 g    19 t
ORIGIN

Alignment Scores:
Pred. No.:               0.131
Score:                   69.00
Percent Similarity:      100.00%
Best Local Similarity:   100.00%
Query Match:             100.00%
DB:                      12

Length:        234
Matches:       14
Conservative:  0
Mismatches:    0
Indels:        0
Gaps:          0

US-09-856-070-17 (1-14) x BG754562 (1-234)

Qy     1 GluArgGluLysGluGlnMetMetArgGluLysGluGlnLeu 14
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Db    70 GAGAGAGAAGAGAAAGAGCAGATGATGCGAGAGAAGGAGAGTTG 111

RESULT 5
BE843004/C
LOCUS        BE843004                    265 bp    mRNA    linear    EST 24-SEP-2000
DEFINITION   MR4-ST0240-240900-012-h05 ST0240 Homo sapiens cDNA, mRNA sequence.
ACCESSION    BE843004
VERSION      BE843004.1  GI:10275382
KEYWORDS     EST.
SOURCE       Homo sapiens
ORGANISM     Homo sapiens
             Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
             Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
REFERENCE    1  (bases 1 to 265)
AUTHORS      Dias Neto,E., Garcia Correa,R., Verjovski-Almeida,S., Briones,M.R.,
             Nagai,M.A., da Silva,W.Jr., Zago,M.A., Bordin,S., Costa,F.F.,
             Goldman,G.H., Carvalho,A.F., Matsukuma,A., Baia,G.S., Simpson,D.H.,
             Brunstein,A., deOliveira,P.S., Bucher,P., Jongeneel,C.V., O'Hare
             ,M.J. Soares,F., Brentani,R.R., Reis,L.F., de Souza,S.J. and
             Simpson,A.J.
             Shotgun sequencing of the human transcriptome with ORF-expressed
             sequence tags
TITLE        Proc Natl Acad Sci U S A 97 (7), 3491-3496 (2000)
JOURNAL
MEDLINE      20202663
COMMENT      Contact: Simpson A.J.G.
             Laboratory of Cancer Genetics
             Ludwig Institute for Cancer Research
             Rua Prof. Antonio Prudente 109, 4 andar, 01509-010, Sao Paulo-SP,
             Brazil
             Tel: +55-11-2704922
             Fax: +55-11-2707001
             Email: asimpson@ludwig.org.br
             This sequence was derived from the FAPESP/LICR Human Cancer Genome
             Project. This entry can be seen in the following URL
             (http://www.ludwig.org.br/scripts/gethtml2.pl?1-MR4 ST0240-240
             900-012-h05&t2-2000-09-24&t4-1)
             Seq primer: puc 18 forward
             High quality sequence start: 19
             High quality sequence stop: 265.

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              /db_xref="taxon:9606"
              /clone_lib="ST0240"
              /dev_stage="Adult"
              /note="Organ: stomach; Vector: puc18; Site_1: SmaI;
              Site_2: SmaI; A mini-library was made by cloning products
              derived from ORESTES PCR (U.S. Letters Patent application
              No. 196,716 – Ludwig Institute for Cancer Research)
              profiles into the pUC 18 vector. Reverse transcription of
              tissue mRNA and cDNA amplification were performed under

Alignment Scores:
Pred. No.:                        0.154          Length:           275
Score:                            69.00          Matches:          14
Percent Similarity:               100.00%        Conservative:     0
Best Local Similarity:            100.00%        Mismatches:       0
Query Match:                      100.00%        Indels:           0
DB:                                              Gaps:             14

US-09-856-070-17 (1-14) x BM84124 (1-275)

Qy    1  GluArgGluLysGlnMetMetArgGluLysGluGluLeu 14
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LOCUS        BF804323                    279 bp    mRNA    linear    EST 12-JAN-2001
DEFINITION   QV4-CIO151 O3I100 513 105 CIO151 Homo sapiens cDNA, mRNA sequence.
ACCESSION    BF804323
VERSION      BF804323.1    GI:12133312
KEYWORDS     EST.
SOURCE       Homo sapiens.
  ORGANISM   Homo sapiens
             Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
             Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
REFERENCE    1  (bases 1 to 279)
  AUTHORS    Dias Neto,E., Garcia Correa,R., Verjovski-Almeida,S., Briones,M.R.,
             Nagai,M.A., da Silva,W. Jr., Zago,M.A., Bordin,S., Costa,F.F.,
             Goldman,G.H., Carvalho,A.F., Matsukuma,A., Baia,G.S., Simpson,D.H.,
             Brunstein,A., deOliveira,P.S., Bucher,P., Jongeneel,C.V., O'Hare
             ,M.J., Soares,F., Brentani,R.R., Reis,L.F., de Souza,S.J. and
             Simpson,A.J.
  TITLE      Shotgun sequencing of the human transcriptome with ORF expressed
             sequence tags
  JOURNAL    Proc. Natl. Acad. Sci. U.S.A. 97 (7), 3491-3496 (2000)
  MEDLINE    20292663
COMMENT      Contact: Simpson A.J.G.
             Laboratory of Cancer Genetics
             Ludwig Institute for Cancer Research
             Rua Prof. Antonio Prudente 109, 4 andar, 01509 010, Sao Paulo-SP,
             Brazil
             Tel: +55-11-2704922
             Fax: +55-11-2707001
             Email: asimpson@ludwig.org.br
             This sequence was derived from the FAPESP/LICR Human Cancer Genome
             Project. This entry can be seen in the following URL.
             (http://www.ludwig.org.br/scripts/gethtml2.pl?tl-QV4st2-QV4-CIO151-
             O3I100-513-105st3-2000-11-03st4-1)
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             High quality sequence stop: 279.
FEATURES             Location/Qualifiers
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                     /db_xref="taxon:9606"
                     /clone_lib="CIO151"
                     /dev_stage="Adult"
                     /note="Organ: colon;ins; Vector: puc18; Site_1: Small;
                     Site_2: Small; A mini-library was made by cloning products
                     derived from ORESTES PCR (U.S. Letters Patent application
                     No. 196,716 - Ludwig Institute for Cancer Research)
                     profiles into the pUC 18 vector. Reverse transcription of
                     tissue mRNA and cDNA amplification were performed under
                     low stringency conditions."
BASE COUNT         88 a         53 c       111 g         27 t
ORIGIN

Alignment Scores:
Pred. No.:                        0.156          Length:           279
Score:                            69.00          Matches:          14
Percent Similarity:               100.00%        Conservative:     0
Best Local Similarity:            100.00%        Mismatches:       0
Query Match:                      100.00%        Indels:           0
DB:                                              Gaps:             12

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BASE COUNT         40 a         88 c       58 g         79 t
ORIGIN

Alignment Scores:
Pred. No.:                        0.148          Length:           265
Score:                            69.00          Matches:          14
Percent Similarity:               100.00%        Conservative:     0
Best Local Similarity:            100.00%        Mismatches:       0
Query Match:                      100.00%        Indels:           0
DB:                                              Gaps:             0

US-09-856-070-17 (1-14) x BE843004 (1-265)

Qy    1  GluArgGluLysGlnMetMetArgGluLysGluGluLeu 14
         |||||||||||||||||||||||||||||||||||||||
Db   58  GAGAGAGAGAAAGAAGAGATGATGCGGGAGAAGAGGAGTTG 17

RESULT 6
BM84124
LOCUS        BM84124                    275 bp    mRNA    linear    EST 06-MAR 2002
DEFINITION   K EST01221161 S13KMS5 Homo sapiens cDNA clone S13KMS5-38-G03 5',
             mRNA sequence.
ACCESSION    BM84124
VERSION      BM84124.1    GI:19200533
KEYWORDS     EST.
SOURCE       human.
  ORGANISM   Homo sapiens
             Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
             Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
REFERENCE    1  (bases 1 to 275)
  AUTHORS    Kim,N.S., Hahn,Y., Oh,J.H., Lee,J.Y., Ahn,H.Y., Chu,M.Y., Kim,M.R.,
             Oh,K.J., Cheong,J.E., Sohn,H.Y., Kim,J.M., Park,H.S., Kim,S. and
             Kim,Y.S.
  TITLE      21C Frontier Korean EST Project 2001
  JOURNAL    Unpublished (2002)
COMMENT      Contact: Kim YS
             Genome Research Center
             Korea Research Institute of Bioscience & Biotechnology
             52 Eoeun-dong Yuseong-gu, Daejeon 305-333, South Korea
             Tel: +82-42-860-4470
             Fax: +82-42-860-4409
             Email: yongsung@mail.kribb.re.kr
             Plate: 48 row: G column: 03
             High quality sequence stop: 275.
FEATURES             Location/Qualifiers
     source          1..275
                     /organism="Homo sapiens"
                     /db_xref="taxon:9606"
                     /clone="S13KMS5-38-G03"
                     /clone_lib="S13KMS5"
                     /tissue_type="myeloma"
                     /cell_line="KMS-5"
                     /lab_host="Top10F'"
                     /note="Vector: pCNS; Site_1: EcoRI; Site_2: NotI; The poly
                     (A)+ RNA was dephosphorylated with bacterial alkaline
                     phosphatase (BAP) and then decapped with tobacco acid
                     pyrophosphatase (TAP). The decapped intact mRNA was
                     ligated with DNA-RNA linker including EcoR I site by
                     treatment of T4 RNA ligase and the first strand cDNA was
                     synthesized from oligo dT-selected mRNA by priming with
                     dT-tailed vector. The dT-tailed vector was adjusted to
                     have about 60nt. The cDNA vector was circularized with E.
                     coli DNA ligase after digestion of EcoRI which site is
                     also included in vector. An RNA strand converted to a DNA
                     strand by Okayama-Berg method. The obtained cDNA vectors
                     were used for transformation of competent cells E. coli
                     Top10F' by electroporation method. The cDNA libraries
                     constructed by this method are full-length enriched cDNA
                     library."
BASE COUNT         81 a         48 c       117 g         29 t
ORIGIN

RESULT 9
BI050028/c
LOCUS       BI050028/c
DEFINITION  CM2-CN0294-020101-676-c09 CN0294 Homo sapiens cDNA, mRNA sequence.
ACCESSION   BI050028
VERSION     BI050028.1  GI:14457558
KEYWORDS    EST.
SOURCE      human.
  ORGANISM  Homo sapiens
            Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
            Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
REFERENCE   1  (bases 1 to 294)
  AUTHORS   Dias Neto,E., Garcia Correa,R., Verjovski-Almeida,S., Briones,M.R.,
            Nagai,M.A., da Silva,W. Jr., Zago,M.A., Bordin,S., Costa,F.F.,
            Goldman,G.H., Carvalho,A.F., Matsukuma,A., Baia,G.S., Simpson,D.H.,
            Brunstein,A., deOliveira,P.S., Bucher,P., Jongeneel,C.V., O'Hare
            ,M.J., Soares,F., Brentani,R.R., Reis,L.F., de Souza,S.J. and
            Simpson,A.J.
  TITLE     Shotgun sequencing of the human transcriptome with ORF expressed
            sequence tags
  JOURNAL   Proc. Natl. Acad. Sci. U.S.A 97 (7), 3491-3496 (2000)
  MEDLINE   20202663
  COMMENT   Contact: Simpson A.J.G.
            Laboratory of Cancer Genetics
            Ludwig Institute for Cancer Research
            Rua Prof. Antonio Prudente 109, 4 andar, 01509-010, Sao Paulo-SP,
            Brazil
            Tel: +55-11-2704922
            Fax: +55-11-2707001
            Email: asimpson@ludwig.org.br
            This sequence was derived from the FAPESP/LICR Human Cancer Genome
            Project. This entry can be seen in the following URL
            (http://www.ludwig.org.br/scripts/gethtml2.pl?l=xt2-CN2-CN0294-
            020101-676-c08;t3=2001-01-02&t4=1)
            Seq primer: puc 18 forward
            High quality sequence start: 17
            High quality sequence stop: 294.
FEATURES             Location/Qualifiers
     source          1..294
                     /organism="Homo sapiens"
                     /db_xref="taxon:9606"
                     /clone_lib="GN0294"
                     /dev_stage="Adult"
                     /note="Organ. placenta_normal; Vector: puc18; Site_1: SmaI
                     ; Site_2: SmaI; A mini library was made by cloning
                     products derived from ORESTES PCR (U.S. letters Patent
                     application No. 196,716 - Ludwig Institute for Cancer
                     Research) profiles into  the pUC 18 vector. Reverse
                     transcription of tissue mRNA and cDNA amplification were
                     performed under low stringency conditions."
BASE COUNT     34 a    114 c    56 g    90 t
ORIGIN

Alignment Scores:
Pred. No.:                            294
Score:                  0.154         Matches:            14
Percent Similarity:     69.00         Conservative:        0
Host local Similarity:  100.00%       Mismatches:          0
Query Match:            100.00%       Indels:              0
DB:                                   Gaps:                0

us-09-856-070-17  (1-14) x BI050028 (1-294)

Qy     1 GluArgGluLysGlnMetMetArgGluGluGluLeu 14
         |||||||||||||||||||||||||||||||||||||
Db   246 GAGAGAGAAAAGATGATGAGGGAGGAGGAGTTG 205

RESULT 10
HM827086
LOCUS       HM827086
DEFINITION  K-EST0099421 S9SNH601 Homo sapiens cDNA clone S9SNH601 44-G09 5',
            mRNA sequence.

---

US-09-856-070-17  (1-14) x BF804323 (1-279)

Qy     1 GluArgGluLysGlnMetMetArgGluGluGluLeu 14
         |||||||||||||||||||||||||||||||||||||
Db    88 GAGAGAGAGAAGATGATGAGGGAGGAGGAGTTG 120

RESULT 8
AW845219
LOCUS       AW845219              281 bp    mRNA    linear    EST 19 MAY 2000
DEFINITION  CM2-CT0012 2000-04-02-c05 CT0012 Homo sapiens cDNA, mRNA sequence.
ACCESSION   AW845219
VERSION     AW845219.1  GI:7940736
KEYWORDS    EST.
SOURCE      human.
  ORGANISM  Homo sapiens
            Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
            Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
REFERENCE   1  (bases 1 to 281)
  AUTHORS   Dias Neto,E., Garcia Correa,P., Verjovski-Almeida,S., Briones,M.R.,
            Nagai,M.A., da Silva,W. Jr., Zago,M.A., Bordin,S., Costa,F.F.,
            Goldman,G.H., Carvalho,A.F., Matsukuma,A., Baia,G.S., Simpson,D.H.,
            Brunstein,A., deOliveira,P.S., Bucher,P., Jongeneel,C.V., O'Hare
            ,M.J., Soares,F., Brentani,R.R., Reis,L.F., de Souza,S.J and
            Simpson,A.J.
  TITLE     Shotgun sequencing of the human transcriptome with ORF expressed
            sequence tags
  JOURNAL   Proc. Natl. Acad. Sci. U.S.A 97 (7), 3491-3496 (2000),
  MEDLINE   20202663
  COMMENT   Contact: Simpson A.J.G.
            Laboratory of Cancer Genetics
            Ludwig Institute for Cancer Research
            Rua Prof. Antonio Prudente 109, 4 andar, 01509-010, Sao Paulo-SP,
            Brazil
            Tel: +55-11-2704922
            Fax: +55-11-2707001
            Email: asimpson@ludwig.org.br
            This sequence was derived from the FAPESP/LICR Human Cancer Genome
            Project. This entry can be seen in the following URL
            (http://www.ludwig.org.br/scripts/gethtml2.pl?l=xt2-CN2-CT0012-
            699-017-a05&t3=1999-06-29&t4=1)
            Seq primer: puc 18 forward
            High quality sequence start: 10
            High quality sequence stop: 280
FEATURES             Location/Qualifiers
     source          1..281
                     /organism="Homo sapiens"
                     /db_xref="taxon:9606"
                     /clone_lib="CT0012"
                     /dev_stage="Adult"
                     /note="Organ: colon; Vector: puc18; Site_1: SmaI, Site_2:
                     SmaI; A mini-library was made by cloning products derived
                     from ORESTES PCR (U.S. Letters Patent application No. 196
                     ,716 - Ludwig Institute for Cancer Research) profiles
                     into  the pUC 18 vector. Reverse transcription of tissue
                     mRNA and cDNA amplification were performed under low
                     stringency conditions."
BASE COUNT     94 a    52 c    105 g    30 t
ORIGIN

Alignment Scores:
Pred. No.:                            281
Score:                  0.157         Matches:            14
Percent Similarity:     64.00         Conservative:        0
Host local Similarity:  100.00%       Mismatches:          0
Query Match:            100.00%       Indels:              0
DB:                                   Gaps                 0

US-09-856-070-17  (1-14) x AW845219 (1-281)

Qy     1 GluArgGluLysGlnMetMetArgGluGluGluLeu 14
         |||||||||||||||||||||||||||||||||||||
Db   143 GAGAGAGAGAAAAGATGATGAGGGAGGAGGAGTTG 184

## Left column

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ACCESSION   BM827086
VERSION     BM827086.1  GI:19184495
KEYWORDS    EST.
SOURCE      human.
ORGANISM    Homo sapiens
            Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
            Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
REFERENCE   1  (bases 1 to 312)
AUTHORS     Kim,N.S., Hahn,Y., Oh,J.H., Lee,J.Y., Ahn,H.Y., Chu,M.Y., Kim,M.R.,
            Oh,K.J., Cheong,J.E., Sohn,H.Y., Kim,J.M., Park,H.S., Kim,S. and
            Kim,Y.S.
TITLE       21C Frontier Korean EST Project 2001
JOURNAL     Unpublished (2002)
COMMENT     Contact: Kim YS
            Genome Research Center
            Korea Research Institute of Bioscience & Biotechnology
            52 Eoeun-dong Yuseong-gu, Daejeon 305-333, South Korea
            Tel: +82-42-860-4470
            Fax: +82-42-860-4409
            Email: yongsung@mail.kribb.re.kr
            Plate: 44  row: G  column: 09
            High quality sequence stop: 312.
FEATURES             location/Qualifiers
     source          1..312
                     /organism="Homo sapiens"
                     /db_xref="taxon:9606"
                     /clone="S9SNU601-44-G09"
                     /clone_lib="S9SNU601"
                     /sex="M"
                     /tissue_type="Ascites"
                     /cell_type="Epithelial"
                     /cell_line="SNU-601"
                     /lab_host="top10F'"
                     /note="organ: Stomach; Vector: pME18S-FL3; Site_1: XhoI;
                     Site_2: XhoI. The poly (A) RNA was dephosphorylated with
                     bacterial alkaline phosphatase (BAP) and then decapped
                     with tabacco acid pyrophosphatase (TAP). The decapped
                     intact mRNA was ligated with DNA-RNA linker including SfiI
                     site by treatment of T4 RNA ligase and the first strand
                     cDNA was synthesized with Superscript II using SfiI
                     oligo-dT primer. After first strand synthesis, RNA was
                     degraded by NaOH treatment and cDNA was amplified by PCR
                     reaction. The PCR products were digested with SfiI and
                     cloned into DraIII-digested pME18S-FL3 vector. The
                     obtained cDNA vectors were used for transformation of
                     competent cells E.coli top10F' by electroporation method
                     The cDNA libraries constructed by this method are
                     full-length enriched cDNA library."
BASE COUNT    108 a    60 c   110 g    34 t
ORIGIN

Alignment Scores:
Prod. No.:                0.174
Score:                   69.00
Percent Similarity:     100.00%
Best Local Similarity:  100.00%
Query Match:            100.00%
DB:

US-09-856-070-17 (1-14) x BM827086 (1-312)

Qy    1  GluArgGluLysGlnMetMetArgGluLysGluGluLeu 14
         ||||||||||||||||||||||||||||||||||||||||
Db  182  GAGAGAGAAACAGATGATGCGGGAGAAGGAGGAGTTG 223

RESULT 11
A1909763
LOCUS       A1909763                 335 bp    mRNA    linear   EST 30-MAR-2000
DEFINITION  QV-BT223 220499 848 BT223 Homo sapiens cDNA, mRNA sequence.
ACCESSION   A1909763
VERSION     A1909763.1  GI:6500443
KEYWORDS    EST.
SOURCE      human.
```

## Right column

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ORGANISM    Homo sapiens
            Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
            Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
REFERENCE   1  (bases 1 to 335)
AUTHORS     Dias Neto,E., Garcia Correa,R., Verjovski-Almeida,S., Briones,M.R.,
            Nagai,M.A., da Silva,W.Jr., Zago,M.A., Bordin,S., Costa,F.F.,
            Goldman,G.H., Carvalho,A.F., Matsukuma,A., Baia,G.S., Simpson,D.H.,
            Brunstein,A., deOliveira,P.S., Bucher,P., Jongeneel,C.V., O'Hare
            ,M.J., Soares,F., Brentani,R.R., Reis,L.F., de Souza,S.J. and
            Simpson,A.J.
TITLE       Shotgun sequencing of the human transcriptome with ORF expressed
            sequence tags
JOURNAL     Proc. Natl. Acad. Sci. U.S.A. 97 (7), 3491-3496 (2000)
MEDLINE     20202663
COMMENT     Contact: Simpson A.J.G.
            Laboratory of Cancer Genetics
            Ludwig Institute for Cancer Research
            Rua Prof. Antonio Prudente 109, 4 andar, 01509-010, Sao Paulo SP,
            Brazil
            Tel: +55-11-2704922
            Fax: +55-11-2707001
            Email: asimpson@ludwig.org.br
            This sequence was derived from the FAPESP/LICR Human Cancer Genome
            Project. This entry can be seen in the following URL
            (http://www.ludwig.org.br/seq/gethtml.pl?t1=QV&t2=QV-BT223-036.html
            &t3=22049&t4=1)
            Seq primer: puc 18 forward.
FEATURES             location/Qualifiers
     source          1..335
                     /organism="Homo sapiens"
                     /db_xref="taxon:9606"
                     /clone_lib="BT223"
                     /sex="female"
                     /dev_stage="Adult"
                     /note="organ: breast; vector: puc18; Site_1: SmaI; Site_2:
                     SmaI. A mini-library was made by cloning products derived
                     from ORESTES PCR (U.S. Letters Patent application No. 196
                     ,716 - Ludwig Institute for Cancer Research) profiles
                     into the pUC 18 vector. Reverse transcription of tissue
                     mRNA and cDNA amplification were performed under low
                     stringency conditions."
BASE COUNT    103 a    65 c   128 g    39 t
ORIGIN

Alignment Scores:
Prod. No.:                0.185
Score:                   69.00
Percent Similarity:     100.00%
Best Local Similarity:  100.00%
Query Match:            100.00%
DB:

US-09-856-070-17 (1-14) x A1909763 (1-335)

Qy    1  GluArgGluLysGlnMetMetArgGluLysGluGluLeu 14
         ||||||||||||||||||||||||||||||||||||||||
Db  143  GAGAGAGAAACAGATGATGCGGGAGAAGGAGGAGTTG 184

RESULT 12
BQ323837
LOCUS       BQ323837                 358 bp    mRNA    linear   EST 17 MAY 2002
DEFINITION  CMo-C10095-101000-648-b05 CI0095 Homo sapiens cDNA, mRNA sequence.
ACCESSION   BQ323837
VERSION     BQ323837.1  GI:20935634
KEYWORDS    EST.
SOURCE      human.
ORGANISM    Homo sapiens
            Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
            Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
REFERENCE   1  (bases 1 to 358)
AUTHORS     Dias Neto,E., Garcia Correa,R., Verjovski-Almeida,S., Briones,M.R.,
            Nagai,M.A., da Silva,W.Jr., Zago,M.A., Bordin,S., Costa,F.F.,
            Goldman,G.H., Carvalho,A.F., Matsukuma,A., Baia,G.S., Simpson,D.H.,
```

COMMENT

Contact: Simpson A.J.G.
Laboratory of Cancer Genetics
Ludwig Institute for Cancer Research
Rua Prof. Antonio Prudente 109, 4 andar, 01509-010, Sao Paulo-SP,
Brazil
Tel: +55-11-2704922
Fax: +55-11-2707001
Email: ajsimpson@ludwig.org.br
This sequence was derived from the FAPESP/LICR Human Cancer Genome
Project. This entry can be seen in the following URL.
(http://www.ludwig.org.br/scripts/gethtml2.pl?tl=iM3&tz=iM3-GN0516-
090501-010-d10&t3=2001-05-09&t4=1)
Seq primer: puc 18 forward
High quality sequence start: 11
High quality sequence stop: 348

FEATURES            Location/Qualifiers
source              1..364
                    /organism="Homo sapiens"
                    /db_xref="taxon:9606"
                    /clone_lib="GN0516"
                    /dev_stage="Adult"
                    /note="Organ: placenta_normal; Vector: puc18; Site_1: SmaI;
                    Site_2: SmaI. A mini library was made by cloning
                    products derived from ORESTES PCR (U.S. Letters Patent
                    application No. 196,716 - Ludwig Institute for Cancer
                    Research) profiles into the puc 18 vector. Reverse
                    transcription of tissue mRNA and cDNA amplification were
                    performed under low stringency conditions."

BASE COUNT      112 a      64 c      146 g      42 t
ORIGIN

Alignment Scores:
Pred. No.:                         0.202            Length:            364
Score:                             69.00            Matches:           14
Percent Similarity:                100.00%          Conservative:      0
Best Local Similarity:             100.00%          Mismatches:        0
Query Match:                       14               Indels:            0
DB:                                                 Gaps:              0

US-09-856-070-17 (1-14) x BQ368118 (1-364)

Qy     1  GluArgGluLysGluGlnMetMetArgGluLysGluGluLeu 14
          ||||||||||||||||||||||||||||||||||||||||||
Db    89  GA:AGA:A:AAA:AG:A:ATGATG:C:GAGAAGGAGGAGTTG 130

RESULT 14
BQ318340/c
LOCUS           BQ318340                                         401 bp     mRNA         linear     EST 17-MAY-2002
DEFINITION      MF1-CT0529-140900-002-a12 CT0529 Homo sapiens cDNA, mRNA sequence.
ACCESSION       BQ318340
VERSION         BQ318340.1  GI:20924109
KEYWORDS        EST.
SOURCE          Homo sapiens
  ORGANISM      Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
                Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
REFERENCE       1  (bases 1 to 401)
  AUTHORS       Dias Neto,E., Garcia Correa,R., Verjovski Almeida,S., Briones,M.R.,
                Nagai,M.A., da Silva,W.Jr., Zago,M.A., Bordin,S., Costa,F.F.,
                Goldman,G.H., Carvalho,A.F., Matsukuma,A., Baia,G.S., Simpson,D.H.,
                Brunstein,A., deOliveira,P.S., Bucher,P., Jongeneel,C.V., O'Hare,
                M.J., Soares,F., Brentani,R.R., Reis,L.F., de Souza,S.J. and
                Simpson,A.J.
    TITLE       Shotgun sequencing of the human transcriptome with ORF expressed
                sequence tags
  JOURNAL       Proc. Natl. Acad. Sci. U.S.A. 97 (7), 3491-3496 (2000)
  MEDLINE       20202663
  COMMENT       Contact: Simpson A.J.G.
                Laboratory of Cancer Genetics
                Ludwig Institute for Cancer Research
                Rua Prof. Antonio Prudente 109, 4 andar, 01509-010, Sao Paulo-SP,
                Brazil
                Tel: +55-11-2704922

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TITLE           Brunstein,A., deOliveira,P.S., Bucher,P., Jongeneel,C.V., O'Hare,
                M.J., Soares,F., Brentani,R.R., Reis,L.F., de Souza,S.J. and
                Simpson,A.J.
                Shotgun sequencing of the human transcriptome with ORF expressed
                sequence tags
JOURNAL         Proc. Natl. Acad. Sci. U.S.A. 97 (7), 3491-3496 (2000)
MEDLINE         20202663
COMMENT         Contact: Simpson A.J.G.
                Laboratory of Cancer Genetics
                Ludwig Institute for Cancer Research
                Rua Prof. Antonio Prudente 109, 4 andar, 01509-010, Sao Paulo-SP,
                Brazil
                Tel: +55-11-2704922
                Fax: +55-11-2707001
                Email: ajsimpson@ludwig.org.br
                This sequence was derived from the FAPESP/LICR Human Cancer Genome
                Project. This entry can be seen in the following URL.
                (http://www.ludwig.org.br/scripts/gethtml2.pl?tl=CM0&t2=CM0-CI0095-
                301000-64A-b05&t3=2000-10-30&t4=1)
                Seq primer: puc 18 forward
                High quality sequence stop: 2.

FEATURES        Location/Qualifiers
source          1..358
                /organism="Homo sapiens"
                /db_xref="taxon:9606"
                /clone_lib="CI0095"
                /dev_stage="Adult"
                /note="Organ: colon_lits; Vector: puc18; Site_1: SmaI;
                Site_2: SmaI. A mini library was made by cloning products
                derived from ORESTES PCR (U.S. Letters Patent application
                No. 196,716 - Ludwig Institute for Cancer Research)
                profiles into the puc 18 vector Reverse transcription of
                tissue mRNA and cDNA amplification were performed under
                low stringency conditions."

BASE COUNT      112 a      74 c      130 g      42 t
ORIGIN

Alignment Scores:
Pred. No.:                         0.199            Length:            358
Score:                             69.00            Matches:           14
Percent Similarity:                100.00%          Conservative:      0
Best Local Similarity:             100.00%          Mismatches:        0
Query Match:                       14               Indels:            0
DB:                                                 Gaps:              0

US-09-856-070-17 (1-14) x BQ323837 (1-358)

Qy     1  GluArgGluLysGluGlnMetMetArgGluLysGluGluLeu 14
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Db   195  GAGAGAGAGAAAAGCAGATGATGCGCGAGAAGGAGGAGTTG 236

RESULT 13
BQ368118
LOCUS           BQ368118                                         364 bp     mRNA         linear     EST 21-MAY-2002
DEFINITION      FM3-GN0516-090501-010-d10 GN0516 Homo sapiens cDNA, mRNA sequence.
ACCESSION       BQ368118
VERSION         BQ368118.1  GI:21043632
KEYWORDS        EST.
SOURCE          Homo sapiens
  ORGANISM      Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
                Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
REFERENCE       1  (bases 1 to 364)
  AUTHORS       Dias Neto,E., Garcia Correa,R., Verjovski Almeida,S., Briones,M.R.,
                Nagai,M.A., da Silva,W.Jr., Zago,M.A., Bordin,S., Costa,F.F.,
                Goldman,G.H., Carvalho,A.F., Matsukuma,A., Baia,G.S., Simpson,D.H.,
                Brunstein,A., deOliveira,P.S., Bucher,P., Jongeneel,C.V., O'Hare,
                M.J., Soares,F., Brentani,R.R., Reis,L.F., de Souza,S.J. and
                Simpson,A.J.
    TITLE       Shotgun sequencing of the human transcriptome with ORF expressed
                sequence tags
  JOURNAL       Proc. Natl. Acad. Sci. U.S.A. 97 (7), 3491-3496 (2000)
  MEDLINE       20202663

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This sequence was derived from the FAPESP/LICR Human Cancer Genome
Project. This entry can be seen in the following URL
(http://www.ludwig.org.br/scripts/gethtml2.pl?il MP:S<.-MR1 C795.9-
14090C-002-012<1-2000-04-14&t4-1)
Seq primer: puc 18 forward
High quality sequence start: 2
High quality sequence stop: 401.

FEATURES          Location/Qualifiers
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                     /organism="Homo sapiens"
                     /db_xref="taxon:9606"
                     /clone_lib="C10529"
                     /dev_stage="Adult"
                     /note="organ: colon; Vector: puc18; Site_1: SmaI; Site_2:
                     SmaI. A mini-library was made by cloning products derived
                     from ORESTES PCR (U.S. Letters Patent application No. 196
                     ,716 - Ludwig Institute for Cancer Research) profiles
                     into the puc 18 vector. Reverse transcription of tissue
                     mRNA and cDNA amplification were performed under low
                     stringency conditions."

BASE COUNT          56 a          144 c          73 g          128 t
ORIGIN

Alignment Scores:
Prod. No.:                              401
Score:                      69.00       Matches:           14
Percent Similarity:        100.00%      Conservative:       0
Best Local Similarity:     100.00%      Mismatches:         0
Query Match:               100.00%      Indels:             0
DB:                                     Gaps:               0

US-09-856-070-17 (1-14) x BG018340 (1-401)

Qy      1 GluArgGluLysGlnGlnMetMetArgGluLysGluGluLeu 14
          ||||||||||||||||||||||||||||||||||||||||||
Db    285 GAGAGACAGAAGCAGCAGATGATGCGCGAGAAGGAGGAGTTG 244


RESULT 15
BM744771
LOCUS          BM744771          404 bp          mRNA      linear     EST 01-MAR-2002
DEFINITION     K-EST0018496 S4SNU1 Homo sapiens cDNA clone S4SNU1-18-D12 5', mRNA
               sequence.
ACCESSION      BM744771
VERSION        BM744771.1          GI:19066100
KEYWORDS       EST
SOURCE         human.
ORGANISM       Homo sapiens
               Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
               Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
REFERENCE      1 (bases 1 to 404)
AUTHORS        Kim,N.S., Bahu,Y., Oh,J.H., Lee,J.Y., Ahn,H.Y., Chu,M.Y., Kim,M.R.,
               Oh,K.J., Cheong,J.E., Sohn,H.Y., Kim,J.M., Park,H.S., Kim,S. and
               Kim,Y.S.
TITLE          21C Frontier Korean EST Project 2001
JOURNAL        Unpublished (2002)
COMMENT        Contact: Kim YS
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               Tel: +82-42-860-4470
               Fax: +82-42-860-4409
               Email: yonasung@mail.kribb.re.kr
               Plate: 18 row: D column: 12
               High quality sequence stop: 404.

FEATURES          Location/Qualifiers
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                     /db_xref="taxon:9606"
                     /clone="S4SNU1-18-D12"
                     /clone_lib="S4SNU1"
                     /sex="M"

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                     /tissue_type="Stomach"
                     /cell_type="lymphoblast-like"
                     /cell_line="SNU-1"
                     /lab_host="Top10F"
                     /note="organ: Stomach. Vector: pT218RPl; Site_1: EcoRI;
                     Site_2: NotI. The poly (A)+ RNA was dephosphorylated with
                     bacterial alkaline pyrophosphatase (BAP) and then decapped
                     with tobacco acid pyrophosphatase (TAP), the decapped
                     intact mRNA was ligated with DNA RNA linker including EcoR
                     I site by treatment of T4 RNA ligase and the first strand
                     cDNA was synthesized from oligo dT-selected mRNA by
                     priming with di-tailed vector. The di-tailed vector was
                     adjusted to have about 60nt. The cDNA vector was
                     circularized with E. coli DNA ligase after digestion of
                     EcoRI which site is also included in vector. An RNA strand
                     converted to a DNA strand by Okayama Berg method. The
                     obtained cDNA vectors were used for transformation of
                     competent cells E. coli Top10F by electroporation method.
                     The cDNA libraries constructed by this method are
                     full-length enriched cDNA library."

BASE COUNT          127 a          83 c          141 g          53 t
ORIGIN

Alignment Scores:
Prod. No.:                              404
Score:                      69.00       Matches:           14
Percent Similarity:        100.00%      Conservative:       0
Best Local Similarity:     100.00%      Mismatches:         0
Query Match:               100.00%      Indels:             0
DB:                                     Gaps:               0

US-09-856-070-17 (1-14) x BM744771 (1-404)

Qy      1 GluArgGluLysGlnMetMetArgGluLysGluGluLeu 14
          ||||||||||||||||||||||||||||||||||||||||||
Db    240 GAGAGACAGAAGCAGCAGATGATGCGCGAGAAGGAGGAGTTG 281


Search completed: January 17, 2003, 21:37:02
Job time : 1856.4 secs